Gabriela Kadlecová

née Suchopárová • gabikadlecova.github.io • gabi.kadlecova@outlook.com

EDUCATION

Charles University, Faculty of Mathematics and Physics, Prague

- Ph.D. in Artificial Intelligence *(ongoing)* — Oct 2021 – present
  - Focus: Surrogate models in Neural architecture search (NAS)
- Master's in Artificial Intelligence (with honors) — Oct 2019 – Sep 2021
  - Thesis: Graph neural networks for NAS performance prediction
- Bachelor's in Computer Science — Oct 2016 – Jun 2019
  - Thesis: Evolutionary optimization of machine learning workflows

PROFESSIONAL AFFILIATIONS & ACTIVITIES

Amazon Alexa, Turin, Italy — Mar 2025 – Sep 2025

- Position: Applied Scientist Intern (L5)

Institute of Computer Science, Czech Academy of Sciences, Prague, Czechia — Mar 2020 – Mar 2025

- Position: Research Assistant – Ph.D. training workplace

Machine Learning Lab, University of Freiburg, Freiburg im Breisgau, Germany — Jun 2023 – Aug 2023

- Position: Research intern, DAAD Short-Term Grants

BISOP – Centre for Modelling of Biological and Social Processes — Apr 2020 – Mar 2025

- Created a neural network model for vaccine waning – survival analysis
- Collaborated on a multiagent model for COVID-19 spread
- Part of the project CoRe at the Faculty of Arts, Charles University

NeuronSW, Prague, Czechia — Jul 2019 – Apr 2020

- ML and IoT startup – predictive analysis of machines based on audio data
- Position: Junior Machine Learning scientist

SELECTED PUBLICATIONS

- Kadlecová, G., Lukasik, J., Pilat, M., Vidnerová, P., Safari, M., Neruda, R., Hutter, F. (2024). Surprisingly strong performance prediction with neural graph features. In Proceedings of the 41st International Conference on Machine Learning. JMLR.org. Link.
- Qin, S.*, Kadlecová, G.*, Pilát, M., Cohen, S. B., Neruda, R., Crowley, E. J., Lukasik, J., Ericsson, L. (2025). Transferrable Surrogates in Expressive Neural Architecture Search Spaces. AutoML Conference, 2025. Link.
- Pilát, M., Suchoparová, G. (2022). Using Graph Neural Networks as Surrogate Models in Genetic Programming. In Proceedings of the Genetic and Evolutionary Computation Conference Companion (pp. 582–585). Association for Computing Machinery. doi: 10.1145/3520304.3529024.

SKILLS

Programming languages

- **Python** – PyTorch, TensorFlow, numpy, scikit-learn, pandas
- C++, Bash, C# (intermediate); C, SQL, R (basic)

Technologies and other skills

- Git, Weights & Biases, python package management, cluster computing – SLURM, PBS
- Deep learning
  - Neural architecture search, Surrogate modelling, Graph neural networks
  - Encoder model finetuning (ModernBERT), in-depth knowledge of the transformer architecture (litgpt)
- Evolutionary algorithms and Genetic programming

OTHER EXPERIENCE

- Contributed to **open-source** projects – whittle (NAS for LLMs), NASBench-PyTorch
- **Reviewed** for JAIR, AutoML Conf 2023-2025, NeurIPS 2021 MetaLearn Workshop
- Gave an **invited talk** on GRAF (ICML '24 paper) at the AutoML Seminars
- Online experience **co-chair** at the AutoML Conference 2024. Presented a tutorial on zero-cost proxies.
- AutoML Fall School – presented a hands-on (2023); **hackathon 1st** place team member (2021, 2022).
- **Teaching** at Charles University – 1 semester of Python labs; 1 semester of nature inspired algorithms.
- Received the Charles University **student grant (GA UK)**.

LANGUAGES

English: CAE certified (level C2), French: DELF certified (level B2). German (conversational), Japanese (B1–B2 level).